# KAYLA ALEXANDER, DVM, DACVP

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#### **EMPLOYMENT**

# Assistant Clinical Professor, Veterinary Anatomic Pathology

Department of Pathobiology and Population Medicine
Mississippi State University · College of Veterinary Medicine
240 Wise Center Drive · MS State, MS 39762
September 2023 – Present

- Serve as primary case coordinator for biopsy submissions submitted to MS State College of Veterinary Medicine and the MS Veterinary Research and Diagnostic Laboratory
- Lead weekly current literature and gross pathology rounds for anatomic and clinical pathology residents
- Serve as co-course leader for the fourth-year veterinary core curriculum course: clinicopathologic conference

## POST-DOCTORAL TRAINING

# **Veterinary Anatomic Pathology Resident**

Mississippi State University · College of Veterinary Medicine 240 Wise Center Drive · MS State, MS 39762 July 2020 – August 2023

- Serve as primary case organizer for necropsy and biopsy submissions including gross pathology, histopathology, special stains, immunohistochemistry, and communication with clients
- Participate in weekly biopsy and gross pathology rounds and literature review
- · Participate in monthly ophthalmology, neuropathology, and oncology rounds
- · Serve as after-hours primary on-call point of contact at least one week and one weekend per month
- Facilitate and participate in teaching, grading, and evaluation of first year introduction to pathology and third year lab services veterinary students

## **Laboratory Animal Medicine Residency Program**

Centers for Disease Control and Prevention · Comparative Medicine Branch 1600 Clifton Rd, NE · Atlanta, GA 30033 July 2019 – May 2020

Duties (0701 Veterinary Medical Science, Grade 9):

- Provided research-related protocol support for traditional laboratory animal species including mice, rats, hamsters, guinea pigs, rabbits, goats, and non-human primates that prevented, alleviated, and minimized pain and distress
- · Prevented, diagnosed, treated, and controlled clinical disease in laboratory animals
- Provided IACUC approved protocol support and attended monthly IACUC meetings
- Facilitated and coordinated clinical pathology and anatomic pathology procedural support
- Participated in weekly resident journal clubs and didactic courses with emphasis on the diseases of traditional laboratory animal species

#### **EDUCATION**

# **Doctor of Veterinary Medicine (DVM), 2019**

Mississippi State University · College of Veterinary Medicine · Starkville, MS

# Bachelor of Science, Veterinary Medical Technology (B.S. VMT), 2012

Mississippi State University · College of Veterinary Medicine · Starkville, MS Summa cum laude

## LICENSURES, CERTIFICATIONS, and BOARD EXAMINATIONS

- 2023 ACVP Phase II Examination · Diplomate of the American College of Veterinary Pathologists (DACVP)
- 2022 ACVP Phase I Certifying Examination
- 2020 Veterinary Medical License · MS State Board of Veterinary Medicine
- 2020 Heartsaver CPR AED · American Heart Association
- 2019 HAZWOPER Hazardous Waste Operations and Emergency Response Standard · Atlanta, GA
- 2019 Veterinary Medical License · GA State Board of Veterinary Medicine
- 2012 Certified Veterinary Technician · MS Board of Veterinary Medicine
- 2012 Veterinary Technician National Examination
- 2009 Certified Pharmacy Technician · Pharmacy Technician Certification Board

# PROFESSIONAL WORK EXPERIENCE

# Certified Veterinary Technician (CVT), 2012 – 2015

Neurology Service · Veterinary Specialty Center · Starkville, MS

Examined patients, instructed veterinary students to effectively perform a neurological exam, managed anesthesia during imaging procedures, performed clinical treatments, organized and maintained clinical inventory

## Certified Pharmacy Technician (CPhT), 2008 - 2010

Southern Family Pharmacy · Starkville, MS

Dispensed patient prescriptions, maintained prescription and OTC inventory, recommended OTC products and therapies, acted as liaison between patient and insurance company, monitored and reported controlled inventory

## **PUBLICATIONS**

Jaffe, M., **Alexander, K**., Ryan, M., Bennett, B., & Baughman, B. (2023). Colonic Hamartomatous Ganglioneuromatosis in a 4 Mo Old Puppy. *Journal of the American Animal Hospital Association*, *59*(5), 224-228. https://doi.org/10.5326/JAAHA-MS-7378.

**Alexander, K.**, Beam, J., Baughman, B., & Morgan, T. W. (2023). High-grade mucoepidermoid carcinoma of the salivary gland in a bull. *Journal of Veterinary Diagnostic Investigation*, *35*(1), 76-80. https://doi.org/10.1177%2F10406387221137550.

Justyn, N. M., Powers, M. J., Hill, G. E., **Alexander, K**., Naveda-Rodríguez, A., & Rush, S. A. (2023). The mechanisms of color production in black skin versus red skin on the heads of New World vultures. *Avian Research*, *14*, 100071. https://doi.org/10.1016/j.avrs.2022.100071.

**Alexander, K**. (2019). Dental Formula. In: Vonk, J., Shackelford, T.K. (eds) *Encyclopedia of Animal Cognition and Behavior*. Springer, Cham. https://doi.org/10.1007/978-3-319-55065-7\_1433.

Beasley, M. J., Hiebert, E. C., Daw, D. N., **Alexander, K. J.**, & Gambino, J. M. (2019). Neurolymphomatosis caused by T-cell lymphosarcoma in a cat: imaging description and treatment review. *Journal of Feline Medicine and Surgery Open Reports*, *5*(1), 2055116919833534.

## ABSTRACTS

Skyler Turner, Alicia Olivier, **Kayla Alexander**, Kaylin McNulty. Necrohemorrhagic Pneumonia in Two Dogs Associated with CNF1+ Hemolytic E. coli. American College of Veterinary Pathologists Annual Meeting. Chicago, IL. 2023.

**Kayla Alexander**, Brittany Baughman. Disseminated Histiocytic Sarcoma in a Quarter Horse Mare. American College of Veterinary Pathologists Annual Meeting. Boston, MA. 2022.

Elizabeth Kyle-Labell, **Kayla Alexander**, Alicia Olivier. Multisystemic Listeriosis in a Sugar Glider. American College of Veterinary Pathologists Annual Meeting. Boston, MA. 2022.

**Kayla Alexander**, Tim Morgan. Salivary Carcinoma in a Bucking Bull. American College of Veterinary Pathologists Annual Meeting. Virtual. 2021.

Joseph Evans, **Kayla Alexander**, Alison Lee, Alyssa Sullivant, Alicia Olivier. Tracheal Osteochondroma in a 4-month-old Golden Retriever. American College of Veterinary Pathologists Annual Meeting. Virtual. 2021.

Peter N. McGinn, Kaylin McNulty, **Kayla Alexander**, Alison M. Lee, Sarah Castaldo, Alicia Olivier. Ductal Plate Malformation in a Juvenile Labrador Retriever. American College of Veterinary Pathologists Annual Meeting. Virtual. 2021.

Caroline Coussens, **Kayla Alexander**, Timothy Morgan. Cantharidin Toxicosis in Two Horses Following Blister Beetle Ingestion. American College of Veterinary Pathologists Annual Meeting. Virtual. 2020.

#### POST-DOCTORAL PATHOLOGY EXTERNSHIPS

Charles River Laboratories (Mattawan, MI · April 2023)

Spent one week on-site gaining experience and insight into the field of toxicologic pathology.

IDEXX Bioanalytics PathConnexx (Virtual · Fall 2022)

Inaugural participant chosen via application and interview processing.

Reviewed and assessed digital histopathology for a variety of laboratory animal species including mice, rats, nonhuman primates, zebrafish, and amphibians. Assessed digital histology slides and developed a lesion scoring system for a toxicologic study concerning hepatic lesions in mice.

## PROFESSIONAL CONFERENCES

2023 Southeastern Veterinary Pathology Conference · Tifton, GA

2022 American College of Veterinary Pathologists Annual Meeting Boston, MA

2022 Southeastern Veterinary Pathology Conference · Tifton, GA

2021 American College of Veterinary Pathologists Annual Meeting (virtual)

2020 American College of Veterinary Pathologists Annual Meeting (virtual)

2020 16th CDC International Symposium on Biosafety · Atlanta, GA

#### **PRESENTATIONS**

Littoral Cell Angiosarcoma in a 14-year-old Mixed Breed Dog

Department of Pathobiology and Population Medicine Seminar · MSU-CVM · Spring 2023 Southeastern Veterinary Pathology Conference · University of Georgia · Tifton, GA · May 2023

Disseminated Histiocytic Sarcoma in a Quarter Horse Mare (poster)

Diagnostic Pathology Focused Scientific Session I

American College of Verterinary Pathologists Annual Meeting · Boston, MA · Fall 2022

Department of Pathobiology and Population Medicine Seminar · MSU-CVM · Fall 2022

Multisystemic Listeriosis in a Sugar Glider (poster – 3<sup>rd</sup> place Veterinary Student Poster Award)

Advisor for Student Poster Presentation: Elizabeth Kyle-Labell

Diagnostic Pathology Focused Scientific Session I

American College of Verterinary Pathologists Annual Meeting · Boston, MA · Fall 2022

Styx Feet Under: Frothy Bloat in a Reticulated Giraffe

Advisor for Student Manuscript and Oral Presentation: Reece Paulk

Clinicopathologic Conference · MSU-CVM · November 2022

Malignant Chemodectoma with Metastasis to the Brain in a 1.5-year-old Goldendoodle Department of Pathobiology and Population Medicine Seminar · MSU-CVM · Spring 2022 Southeastern Veterinary Pathology Conference · University of Georgia · Tifton, GA · May 2022

Salivary Gland Carcinoma in a Bucking Bull (poster and oral)

Diagnostic Pathology Focused Scientific Session II

American College of Verterinary Pathologists Annual Meeting · Virtual · 2021

Tracheal Osteochondroma in a 4-month-old Golden Retriever (poster)

Advisor for Student Poster Presentation: Joseph Evans Diagnostic Pathology Focused Scientific Session II

American College of Verterinary Pathologists Annual Meeting · Virtual · 2021

Ductal Plate Malformation in a Juvenile Labrador Retriever (poster)

Co-Advisor for Student Poster Presentation: Peter McGinn

Diagnostic Pathology Focused Scientific Session II

American College of Verterinary Pathologists Annual Meeting · Virtual · 2021

Sugar, We're Going Down: Visceral and Encephalitic Listeriosis in a Sugar Glider

Department of Pathobiology and Population Medicine Seminar · MSU-CVM · Spring 2021

Loretta's Fall: Heartworm Associated Cerebral Ischemia

Department of Pathobiology and Population Medicine Seminar · MSU-CVM · Fall 2020

Cantharidin Toxicosis in Two Horses Following Blister Beetle Ingestion

Advisor for Student Poster Presentation: Caroline Coussens

American College of Veterinary Pathologists Annual Meeting · Virtual · 2020

Bringing a New Species into the Vivarium

16th CDC International Biosafety Symposium · Atlanta, GA · March 2020

Pre-Conference Courses: Challenges of Introducing New Agents and Animals into Your Institution

Yersiniosis in a Cotton Top Tamarin

Clinicopathologic Conference · MS State University College of Veterinary Medicine · October 2018

Flow Cytometric Evaluation of Canine Lymphocytes After Oral Mycophenolate Mofetil 2016 Annual Research Day · MS State University College of Veterinary Medicine · August 2016

Flow Cytometric Evaluation of Canine Lymphocytes After Oral Mycophenolate Mofetil (Poster) 2016 Merial-NIH National Scholars Symposium · Ohio State University · Columbus, OH · July 2016

### **HONORS AND AWARDS**

- 2022 Davis-Thompson Foundation Pathology Trainee and Scholarship Award
- 2018 Vice President Appointed Phi Zeta (Omega Chapter) Veterinary Academic Honor Society
- 2018 Phi Zeta (Omega Chapter) Veterinary Academic Honor Society
- 2018 The James Miller and First Class (1981) Endowed Scholarship
- 2018 The Addie Scholarship in Veterinary Medicine
- 2018 Salsbury Alternative Career Scholarship
- 2017 Hugh M. Arant, Sr Memorial Scholarship
- 2017 Merck Animal Health Scholarship
- 2016 Morris Animal Foundation Student Grant for Summer Research Experience
- 2016 National SAVMA Symposium Student Travel Grant
- 2016 The Addie Scholarship in Veterinary Medicine
- 2012 Student of the Year MSU CVM Veterinary Medical Technology Program Class of 2012
- 2012 Annual Mikell and Mary Cheek Davis Veterinary Medical Technology Scholarship (1st recipient)
- 2011 The International Scholars Laureate Program · Delegate of Medicine

Melbourne and Sydney, Australia

#### **TEACHING**

2020-2023

CVM 5214: Laboratory Services Rotation Third year veterinary clinical services rotation

Necropsy: 20-25 hours/month

Perform necropsies on inpatient and outpatient submissions for a variety of domestic animals, including external submissions for advanced testing, generate gross reports, trim tissues for histologic processing, report histology, and communicate results with clients and referring veterinarians. Advise third year veterinary students on appropriate necropsy technique, sample collection, gross lesion interpretation, and determining relevant diagnostic tests.

Grade student reports and give constructive feedback to enhance learning of disease pathogenesis. Coach students in presenting weekly college-wide necropsy rounds and providing a concise summary, lesion interpretation, and pathogenesis.

Biopsy Seminar Instructor: 1 hour/month Necropsy Seminar Instructor: 1 hour/month

#### 2020-2023

CVM 5044: Introduction to Veterinary Pathology First year veterinary curriculum pathology course

Lecture: Two 1-hour sessions, annually

Compile and deliver case-based presentations illustrating key general pathology concepts that apply to the unit of study.

Laboratory Instructor: Fifteen 3-hour lab sessions, annually

Organize, deliver, and facilitate weekly 3-hour interactive laboratory sessions. This includes organizing multiple cases that demonstrate concepts taught in lecture and presenting anatomical specimens to students. Laboratory is delivered to small groups as case-based concept stations.

#### 2020-2023

Anatomic Pathology and Specialty Medicine Rounds

Anatomic and/or Clinical Pathology

Participate in weekly or monthly organization in biopsy, gross pathology rounds, clinical pathology, and published literature review

# Oncopathology Rounds

Resident in-charge (2020-2022)

Select, organize, and present oncology cases and clinical discussion sessions to residents, pathology faculty, and oncology faculty

## Neuropathology Rounds

Resident in-charge (Fall 2022)

Select, organize, and present neurology cases and clinical discussion sessions to residents, pathology faculty, and neurology faculty

# Ocular Pathology Rounds

Resident in-charge (Spring 2023)

Select, organize, and present ophthalmology cases and clinical discussion sessions to residents, pathology faculty, and ophthalmology faculty

# SEMINARS, WORKSHOPS, and TRAINING COURSES\_

- 2023 Current Literature and Image Interpretation Course · Davis-Thompson Foundation · Knoxville, TN Novelties tailored to anatomic pathology trainees and those taking Phase 2 of the ACVP exam.
- 2023 Free Friday Seminar Cool Cases from Kentucky · Davis-Thompson Foundation Selected equine case presentations.
- 2023 Dermatopathology · Davis-Thompson Foundation

Select case-based presentations of common and unusual dermatological diseases.

2022 69<sup>th</sup> Annual Pathology of Laboratory Animals (POLA) Course · Davis-Thompson Foundation (virtual)

Lectures on the topic of common diseases in laboratory animal species, histologic correlates, and rodent nomenclature

- 2022 8th Annual WNPRC / Davis-Thompson Foundation Lab Animal Medicine and Pathology Seminar (virtual)
  - Lectures on the topic of common diseases in laboratory animal species, histologic correlates, and rodent nomenclature
- Davis-Thompson Foundation General Pathology Course (virtual)
  Lectures and mock examinations on the topics of general pathology topics including mechanisms fundamental to disease in animals such as principles of cellular injury, inflammation and repair, hemodynamic disorders, physical and chemical injury, neoplasia, congenital and genetic diseases, molecular pathology, and infections in preparation for the ACVP phase I examination.
- Virtual Descriptive Veterinary Pathology Course by the Davis-Thompson Foundation
  Lectures and mock examinations on the topics of gross descriptive pathology, microscopic descriptive pathology, gross-micro correlations, ultrastructural pathology, and special diagnostic techniques (IHC/ISH/PCR).
- 2021 A Place Where Everyone Belongs (virtual)
  - A session designed for staff to increase their awareness of the role and impact of diversity and inclusion in their professional sphere.
- 2020 67<sup>th</sup> Annual Pathology of Laboratory Animals (POLA) Course · Davis-Thompson Foundation (virtual)
  - Lectures on macroscopic pathology of: swine, birds including poultry, reptiles and amphibians, zoo and exotic animals, dogs and cats, fish, non-human primates, laboratory animals, ruminants, wildlife, horses.
- 2020 SHARP Training (virtual)
  - SHARP Training is a course for all MSU employees covering sexual harassment, sexual misconduct, and other forms of discrimination.

#### PROFESSIONAL ACTIVITIES

2020 - 2023	ACVP Trainee Affiliate Member
2020	14th Annual Georgia Veterinarians Day at the Capitol
2019 - 2020	Georgia Veterinary Medical Association
2019 - 2020	American Veterinary Medical Association
2019 - 2020	American Association for Laboratory Animal Science
2015 – 2019	Student American Veterinary Medical Association
2015 – 2019	Student Chapter of the American Society of Laboratory Animal Practitioners
2018	Co-organizer for Biomedical Research Awareness Day · MS State University CVM
2017	Veterinary Student Day · Centers for Disease Control and Prevention · Atlanta, GA
2016	National SAVMA Symposium · Iowa State University · Ames, IA
2015 – 2017	Student Chapter of the American College of Veterinary Pathologists
2015 – 2017	Swine, Small Ruminant, and Poultry Club
2015 – 2016	Wildlife, Exotic, Zoo, Avian, and Aquatic Animal Medicine Club
2010 – 2016	Mississippi Veterinary Medical Association
2010 – 2015	National Association of Veterinary Technicians in America

#### LEADERSHIP ROLES

2018 – 2019	Vice President Appointed – Phi Zeta (Omega Chapter) Veterinary Academic Honor Society
2016 – 2019	Secretary – MSU CVM Student Chapter of the American Society of Laboratory Animal
	Practitioners
2016 – 2017	President Elect – MSU CVM Student Chapter of the American College of Veterinary
	Pathologists
2016 – 2017	Vet Gazette Representative – MSU CVM SAVMA
2015 – 2016	Class of 2019 Representative – MSU CVM Student Chapter of the American College of
	Veterinary Pathologists

#### RESEARCH EXPERIENCE

Pharmacodynamic Evaluation of Mycophenolate Mofetil in the Dog

Dr. Andrew Mackin · Professor and Department Head, Department of Clinical Sciences

Study Summary: To determine if Mycophenolate Mofetil produces an immunomodulatory effect by inducing lymphocyte apoptosis or by inhibiting lymphocyte proliferation and which T-cell population (CD4+ or CD8+) is most affected.

#### LABORATORY ANIMAL MEDICINE EXTERNSHIPS 2018

Centers for Disease Control and Prevention · Atlanta, GA

Presentation: "Yersiniosis in a Cotton Top Tamarin"

Assessed health and status of a diverse range of laboratory animal species including NHPs, rodents, goats, and bats, assisted with the development of treatment plans for these animals, performed necropsy and sample collections of sentinel animals and NHPs, gained further experience in the proper use and employment of personal protective equipment, discussed the design and functionality of highly biosecure laboratories (ABSL-3 and ABSL-4).

Yerkes National Primate Research Center · Emory University · Atlanta, GA

Presentation: "CNS Emergencies in Nonhuman Primates with Cephalic Implants"

Performed daily observation and treatments of NHPs, assisted with several clinical procedures (including lymph node and rectal biopsies), administered TB tests to NHPs, collected hematology samples from NHPs, participated in IACUC protocol review, visited research facilities housing other laboratory animal species on Emory's Division of Animal Resources main campus. Spent a week at the breeding facility / field station seeing clinical cases including diarrhea, dehydration, trauma. Assisted with minor surgical procedures, collected hematological and fecal samples, administered oral and injectable medications, participated in daily infant monitoring.

Vanderbilt University · Nashville, TN

Presentation: "CNS Emergencies in Nonhuman Primates with Cephalic Implants"

Project: Quick Clinical Reference Guide for Select CNS Emergencies in NHPs

Performed tuberculosis testing and physical examination of NHPs, participated in cage-side health monitoring rounds of several laboratory animal species, discussed governmental research regulations and biosecure facility design, explored the Mouse Neurobehavioral Core and the Mouse Metabolic Phenotyping Core, participated in protocol review and monitoring.

#### **ELECTIVE COURSEWORK**

CVM 5854 Aguarium Health and Management

Learned concepts and techniques for the maintenance of common aquarium species and developed selected skills relating to aquarium medicine.

CVM 5560 Pathology Advanced Clinical Rotation

Assisted in the instruction of third year veterinary students on the process of conducting a clinical necropsy and sample collection. Processed and reviewed histological preparations of clinical necropsy cases.

CVM 5560 Laboratory Animal Medicine Advanced Clinical Rotation

Monitored research-animal health and clinical treatments, assisted investigators with animal handling and sample collection techniques, collected specimens for routine health monitoring of rodents.

CVM 5906 Clinical Cytology Elective

Examined histological and hematological slides and discussed the pathological abnormalities of each.

CVM 5990 Tropical Veterinary Medicine and One Health

Makere University · Kampala, Uganda

Learned about zoonotic disease threats, agricultural development, public food security and food safety, and wildlife medicine as it pertains to challenges facing Uganda.

#### REFERENCES

Alicia Olivier, DVM, DACVP, PhD

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